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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,468	12/14/2001	Ralph M. Kling	42390P12912	1717

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EXAMINER

BELL, PAUL A

ART UNIT	PAPER NUMBER
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2675

DATE MAILED: 10/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/022,468

Applicant(s)

KLING, RALPH M.

Examiner

PAUL A BELL

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3 and 12 –16 are rejected under 35 U.S.C. 102(b) as being anticipated by Busch (5,510,806).

With regards to claim 1 Busch teaches an apparatus comprising: a computing subsystem to process data and execute program instructions (figure 1, "portable computer"); and an optical subsystem coupled to said computing subsystem (figure 1, item 42 "LCD projection structure"), said optical subsystem integrated into said apparatus to project an image for said computing subsystem onto a viewing surface (figure 1, item 40a).

With regard to claim 2 Busch teaches the apparatus of claim 1 further wherein said computing subsystem and said optical subsystem are housed together in a base unit (figure 1).

With regard to claim 3 Busch teaches the apparatus of claim 2 wherein said viewing surface comprises a portable, passive screen having a white area to display said image (figure 1, items 30 and 32 it is inherent that a screen is white so as to work properly and not distort color).

With regard to claim 12 Busch teaches a mobile computer comprising: a memory to store instructions, a processor coupled to said memory, said processor to execute said instructions; a graphics controller coupled to said processor, said graphics controller to receive commands from said processor and to generate display data (figure 1 these features are inherent to "portable computer"); a light modulator coupled to said graphics controller (figure 2, item 52), to receive said display data and to modulate light based on said display data figure 1, item 42, "LCD projection structure"); and an optic coupled to said light modulator (figure 2, items 46 and 51), said optic to receive modulated light from said light modulator, said optic to create an image on a surface (figure 1, item 40a "IMAGE").

With regard to claim 13 Busch teaches the mobile computer of claim 12 wherein said light modulator comprises a silicon based semiconductor device to reflect light through said optic (figure 2, item 52).

With regard to claim 14 Busch teaches the mobile computer of claim 13 wherein said silicon based semiconductor device comprises a liquid crystal on semiconductor (LCOS) device (figure 2, item 52).

With regard to claim 15 Busch teaches the mobile computer of claim 14 wherein said mobile computer lacks a liquid crystal display (LCD) screen (figure 1, column 3, lines 26-35).

With regard to claim 16 Busch teaches the mobile computer of claim 15 wherein said surface comprises a passive display screen to display said image (figure 1, column 3, lines 26-35).

3. Claims 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Herrick (5,483,250).

With regard to claim 18 Herrick teaches a method comprising: executing program instructions on a mobile computer; generating display data based on results of said instructions (figure 1, item 10 "notebook computer"); propagating said display data to a micro projection system that is integrated within said mobile computer (figure 1, items 22 and 24); modulating light beams in response to said display data; and projecting modulated light beams through optics (column 2, lines 45-63).

With regard to claim 19 Herrick teaches the method of claim 18 further comprising displaying an image resulting from said modulated light beams onto a portable, passive display screen (figure 1, item 24, column 1, lines 40-45).

With regard to claim 20 Herrick teaches the method of claim 19 further comprising storing said display data in a frame

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buffer within said micro projection system integrated within said mobile computer (column 1, lines 45-48).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4-11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Busch (5510806) in view of Miyashita (5,782,548).

With regard to claim 4 Busch does not illustrate the apparatus of claim 3 further comprising a first wireless input device coupled to said computing subsystem via a first wireless communication link, said first wireless input device to receive user input and to send said user input to said computing subsystem via said first wireless communication link.

Miyashita teaches a first wireless input device (figure 1, item 20) coupled to "projection system" via a first wireless communication link (figure 2a, items 14a and 14b) said first wireless input device to receive user input and to send said user input to said computing subsystem via said first wireless communication link (figure 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Busch

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invention to have a wireless control as illustrated by Miyashita because Miyashita teaches in figure 1 that one can walk about the room and control the presentation to the people as motivation.

With regard to claim 5 the combination of Busch and Miyashita teaches the apparatus of claim 4 wherein said first wireless input device is a keyboard (See Miyashita figure 3 many keys on a board).

With regard to claim 6 the combination of Busch and Miyashita teaches the apparatus of claim 5 further comprising a second wireless input device coupled to said computing subsystem via a second wireless communication link, wherein said wireless input device is a mouse (See Miyashita figure 5 item 20 "trackball means" used to do mouse functions).

With regard to claim 7 the combination of Busch and Miyashita teaches the apparatus of claim 6 wherein said optical subsystem comprises an integrated micro projection device (See Busch figure 1, item 42).

With regard to claim 8 the combination of Busch and Miyashita teaches the apparatus of claim 7 wherein said micro projection device comprises a liquid crystal on semiconductor (LCOS) device to manipulate light in response to graphical data (See Busch figure 2, item 52).

With regard to claim 9 the combination of Busch and Miyashita teaches the apparatus of claim 8 further comprising optics to receive manipulated light from said LCOS device, said optics to form said manipulated light into said image (See Busch figure 2, items 51 and 46).

With regard to claim 10 the combination of Busch and Miyashita teaches the apparatus of claim 9 further comprising a wireless transceiver coupled to said computing subsystem, said wireless transceiver to form said first wireless communication link between said computing subsystem and said first wireless input devices, and to form said second wireless communication link between said computing subsystem and said second wireless input device (SEE Miyashita figure 5).

With regard to claim 11 the combination of Busch and Miyashita teaches the apparatus of claim 10 wherein said apparatus comprises a mobile computer system (See Busch figure 1 "portable computer").

With regard to claim 17 the combination of Busch and Miyashita was show above to cover all these limitations.

6. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Herrick (5,483,250) in view of Miyashita (5,782,548).

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With regard to claim 21 Herrick does not illustrate the method of claim 20 further comprising receiving user input from a wireless input device via a wireless communication link.

Miyashita teaches a projection system receiving user input from a wireless input device via a wireless communication link (figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Herrick invention to have a wireless control as illustrated by Miyashita because Miyashita teaches in figure 1 that one can walk about the room and control the presentation to the people as motivation.

Conclusion


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Bell whose telephone number is (703) 306-3019.

If attempts to reach the examiner by telephone are unsuccessful the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377 can help with any inquiry of a general nature or relating to the status of this application.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Or Faxed to: (703) 872-9314 (for Technology Center 2600 only)
Or Hand-delivered to: Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor
(Receptionist).


Paul Bell
Art unit 2675
September 30, 2003


STEVEN SARAS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600